# PCG-K43F/K43Q/K44FP/K45/K45F/K47
# PCG-K415B/K415S

# SERVICE MANUAL

**Ver. 3 2005D**

**Revision History**

| Area | Model | Lineup | |
|---|---|---|---|
| American | US Canadian | PCG-K45<br>PCG-K47 | |
| | Latin | PCG-K43F<br>PCG-K44FP<br>PCG-K45F | ⚠1 [MA]<br>⚠1 [MA]<br>⚠1 [MA] |
| | Quebec | PCG-K43Q | ⚠1 [MA] |
| European | AEP/UK | PCG-K415B<br>PCG-K415S | |

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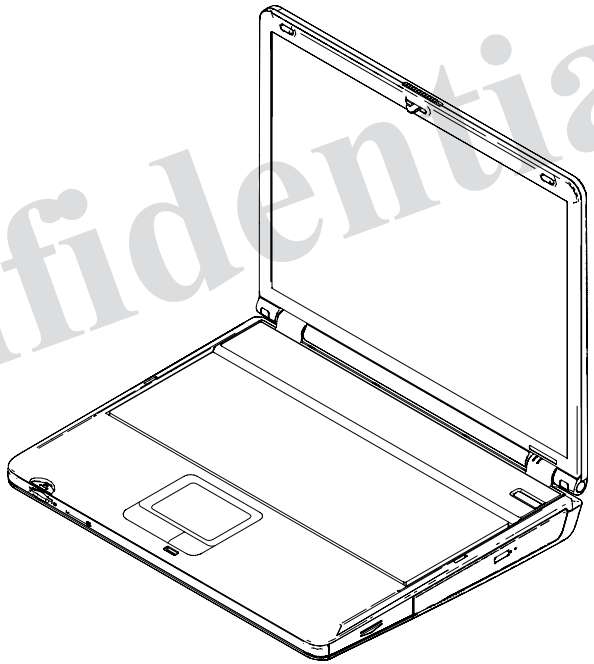

MEMORY STICK™

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· Design and specifications are subject to change without notice.

· 本機の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

PERSONAL COMPUTER

SONY®

9-876-406-03

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All other names of systems, products and services in this manual are trademarks or registered trademarks of their respective owners. In this manual, the (TM) or (R) mark are not specified.

Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

CAUTION: The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100°C (212°F) or incinerate. Dispose of used battery promptly. Keep away from children.

CAUTION: Changing the back up battery.

- Overcharging, short circuiting, reverse charging, multilati on or incineration of the cells must be avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.

# Service and Inspection Precautions

## 1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify are as requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

## 2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the ⚠ mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

## 3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

## 4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

## 5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

## 6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270°C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

**ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!**

**LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANSCE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.**

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変更履歴は,“Revision History”として,本データ末に記載してあります。

# CHAPTER 1.
# SPECIFICATIONS

## 1-1. Specifications

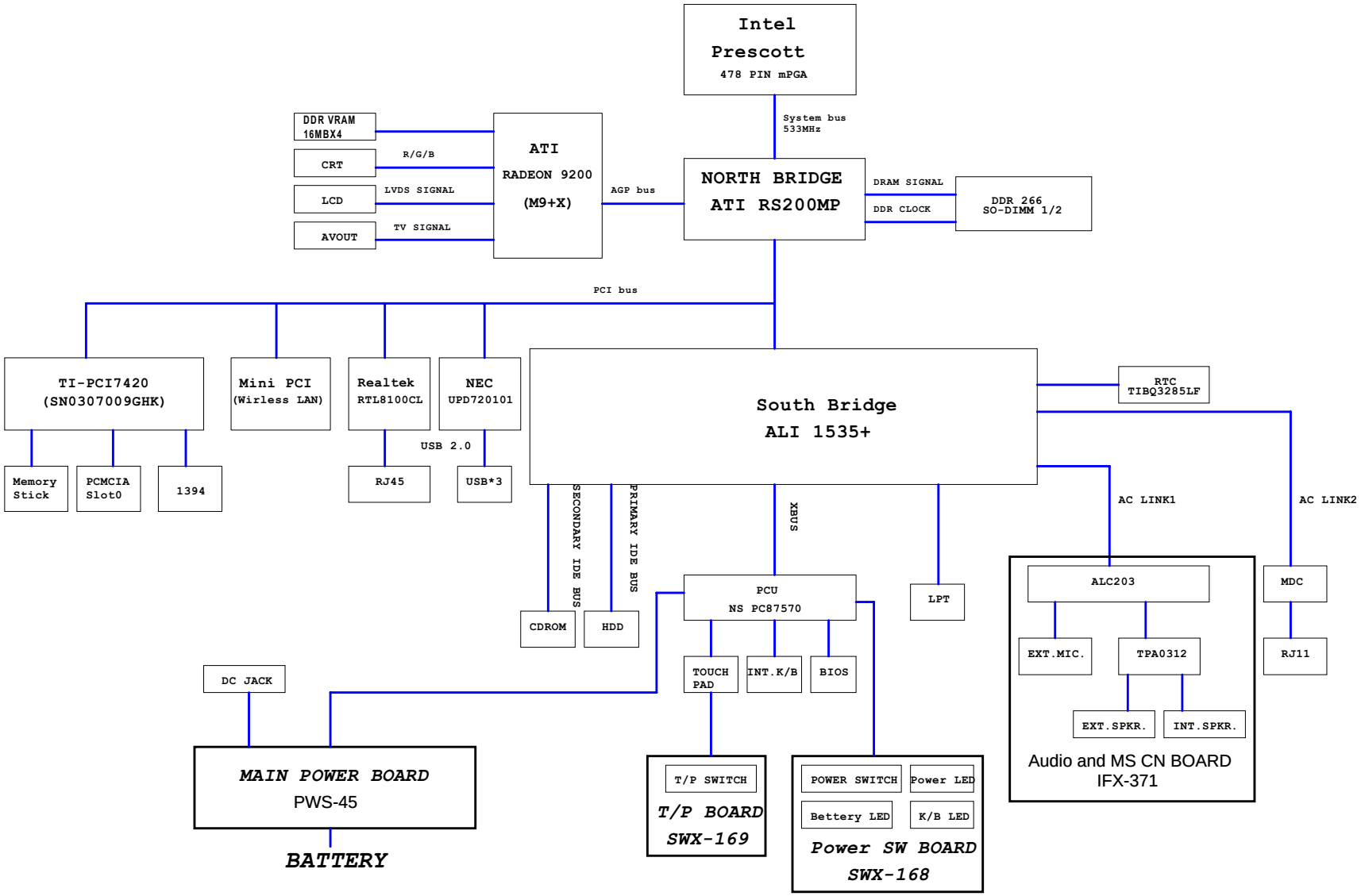
| | AM | | | | | |
|---|---|---|---|---|---|---|
| | PCG-K47 | PCG-K45 | PCG-K45F | PCG-K43F | PCG-K44FP | PCG-K43Q |
| CPU | M-P4 3.20GHz | M-P4 3.20GHz | M-P4 3.20GHz | CelD 3.06GHz | M-P4 3.06GHz | M-P4 3.20GHz |
| Graphic | RADEON IGP 345M | RADEON IGP 345M | RADEON IGP 345M | RADEON IGP 345M | RADEON IGP 345M | RADEON IGP 345M |
| LCD | 15.4/WXGA (High Brightness) | 15.4/WXGA (High Brightness) | 15.4/WXGA (High Brightness) | 15.4/WXGA (High Brightness) | 15.4/WXGA (High Brightness) | 15.4/WXGA (High Brightness) |
| HDD | 100GB | 80GB | 60GB | 40GB | 40GB | 80GB |
| MEMORY(Slot1) | 512MB/DDR/266 | 256MB/DDR/266 | 256MB/DDR/266 | 256MB/DDR/266 | 256MB/DDR/266 | 256MB/DDR/266 |
| MEMORY(Slot2) | 512MB/DDR/266 | 256MB/DDR/266 | 256MB/DDR/266 | 256MB/DDR/266 | 256MB/DDR/266 | 256MB/DDR/266 |
| QUANTITY[STANDARD/MAX] | 1GB/1GB | 512MB/1GB | 512MB/1GB | 512MB/1GB | 512MB/1GB | 512MB/1GB |
| AVAILABLE SLOT(STANDARD) | 1 | 1 | 1 | 1 | 1 | 1 |
| OPT-DRIVE | DVD+-RW/+DL | Combo | DVD+-RW/+DL | Combo | Combo | Combo |
| AC adaptor | AC19V9 | AC19V9 | AC19V9 | AC19V9 | AC19V9 | AC19V9 |
| Battery | BP2NY | BP2NY | BP2NY | BP2NY | BP2NY | BP2NY |
| internal W-LAN | ○ | ○ | ○ | ○ | ○ | ○ |
| OS | XP Home | XP Home | XP Home | XP Home | XP Pro | XP Home |
| | | | △1 [MA] | △1 [MA] | △1 [MA] | △1 [MA] |

| | EU | |
|---|---|---|
| | PCG-K415S | PCG-K415B |
| CPU | M-P4 3.06GHz | CelD 3.06GHz |
| Graphic | Mobility（TM） Radeon（TM）9200 | RADEON IGP 345M |
| LCD | 15.4/WXGA (High Brightness) | 15.4/WXGA (High Brightness) |
| HDD | 60GB | 40GB |
| MEMORY(Slot1) | 256MB/DDR/266 | 256MB/DDR/266 |
| MEMORY(Slot2) | 256MB/DDR/266 | 256MB/DDR/266 |
| QUANTITY[STANDARD/MAX] | 512MB/1GB | 512MB/1GB |
| AVAILABLE SLOT(STANDARD) | 1 | 1 |
| OPT-DRIVE | DVD+-RW/+DL | DVD+-RW/+DL |
| AC adaptor | AC19V9 | AC19V9 |
| Battery | BP2NY | BP2NY |
| internal W-LAN | ○ | ○ |
| OS | XP Home | XP Home |

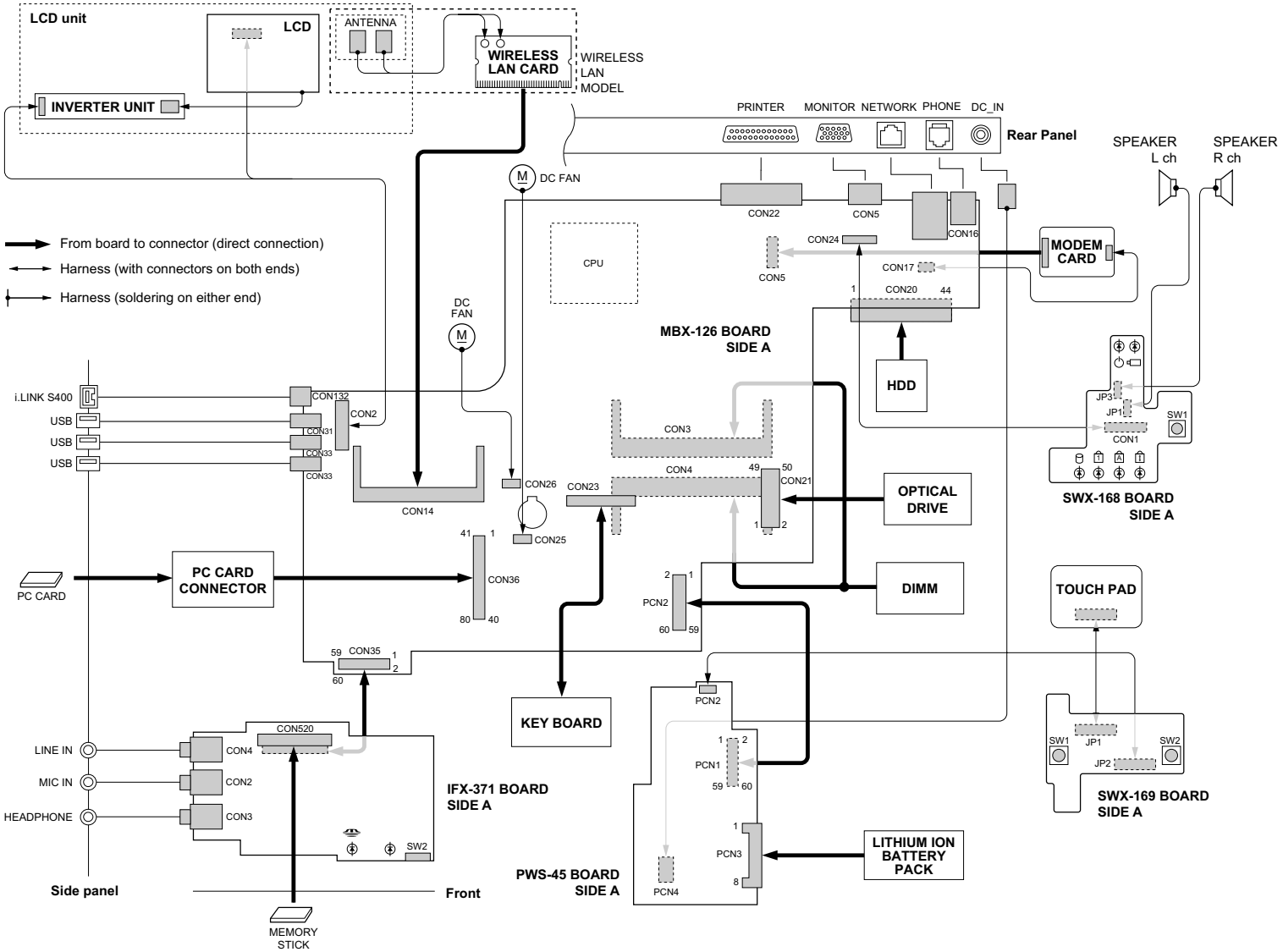
・The trademarks of registered trademarks of above table, refer to page 2.

・本表中の商標・登録商標については，2ページをご参照ください。

# CHAPTER 2.
# BLOCK DIAGRAM



# CHAPTER 3.
# FRAME HARNESS DIAGRAM







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# CHAPTER 4.
# EXPLODED VIEWS AND PARTS LIST

- The parts list is compiled by blocks of a palmrest and bottom etc. The sections of the parts list are different depending on the model. Please refer to list of contents shown in the below.

- 分解図と部品表は，パームレスト，ボトムなどのブロックごとに分かれています。機種によって部品表のセクションが異なりますので，詳細は右下の一覧表を参照してください。


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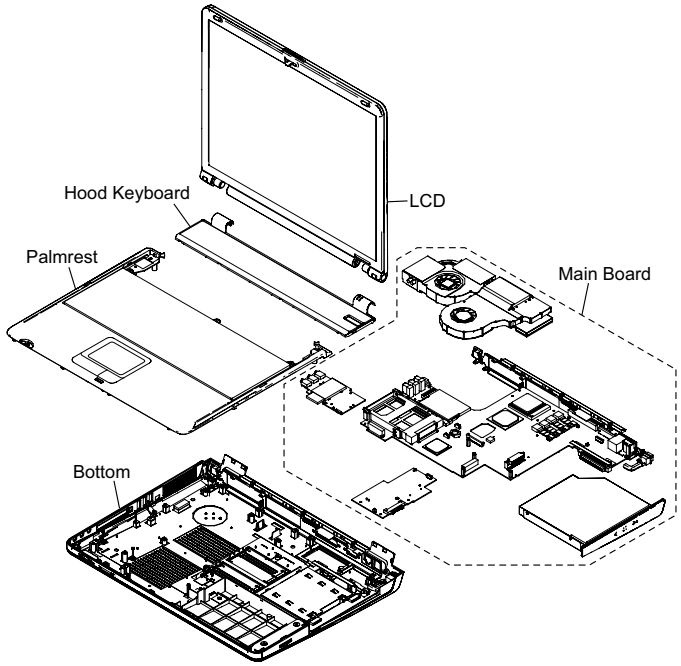



***NOTE:***

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- When two or more parts are shown, use the part described first as the main part.
- The parts marked " $ " are the High Value Modules (HVM).
- The parts marked " # " are the parts on which barcode label is attached. For the barcode label, refer to CHAPTER 5.
- The parts marked "&" are the "Customer Replacable Parts (CRP)" that can be replaced by Field Customer Support. Especially the parts with the <&> mark require the special attention to use them. Here fore, check first whether the desired part is one of the targetted parts of the Customer Replaceable Parts (CRP), or the non-targetted parts by referring to the exploded view.

【使用上の注意】

- *印の部品は常備在庫しておりません。
- 図面番号のない部品は供給しません。
- 併記部品の場合，上部記載部品をメイン部品として使用してください。
- 部品名称の前に$印のついた部品は，High Value Module（HVM）です。
- 商品名称の前に#印のついた部品は，バーコードラベル貼付部品です。
  バーコードラベルについてはCHAPTER 5を参照してください。
- 部品名称の前に&印のついた部品は，お客様窓口などでも交換可能なCustomer Replacable Part（CRP）です。
  特に<&>のついた部品は，使い分けが必要な部品ですので，分解図でCustomer Replacable Parts対象部品か，対象外部品かを必ず御確認ください。

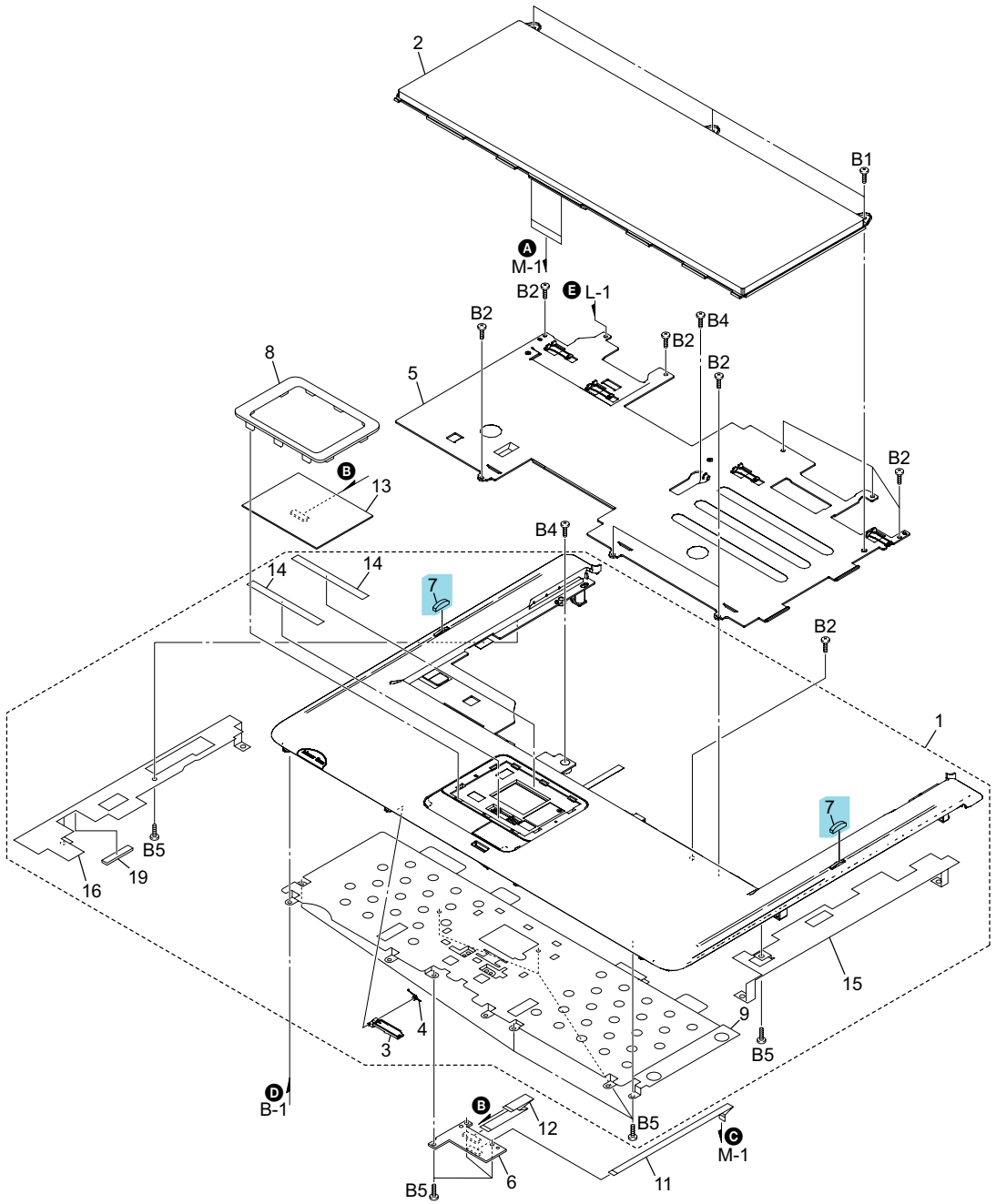
| | | | Palmrest | Main Board | Bottom | Hood Keyboard | LCD | Accessory |
|---|---|---|---|---|---|---|---|---|
| | AM | K47 | P-1 | M-1 | B-1 | H-1 | L-1 | A-1 |
| | | K45 | P-1 | M-1 | B-1 | H-1 | L-1 | A-1 |
| ⚠1 [MA] | | K45F | P-1 | M-1 | B-1 | H-1 | L-1 | A-1 |
| ⚠1 [MA] | | K43F | P-1 | M-1 | B-1 | H-1 | L-1 | A-1 |
| ⚠1 [MA] | | K44FP | P-1 | M-1 | B-1 | H-1 | L-1 | A-1 |
| ⚠1 [MA] | | K43Q | P-1 | M-1 | B-1 | H-1 | L-1 | A-1 |
| | EU | K415S | P-1 | M-1 | B-1 | H-1 | L-1 | A-1 |
| | | K415B | P-1 | M-1 | B-1 | H-1 | L-1 | A-1 |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

⚠印の部品，または⚠印付きの点線で囲まれた部品は，安全性を維持するために重要な部品です。従って交換時は，必ず指定の部品を使用して下さい。

# P-1. Palmrest



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# P-1. Palmrest

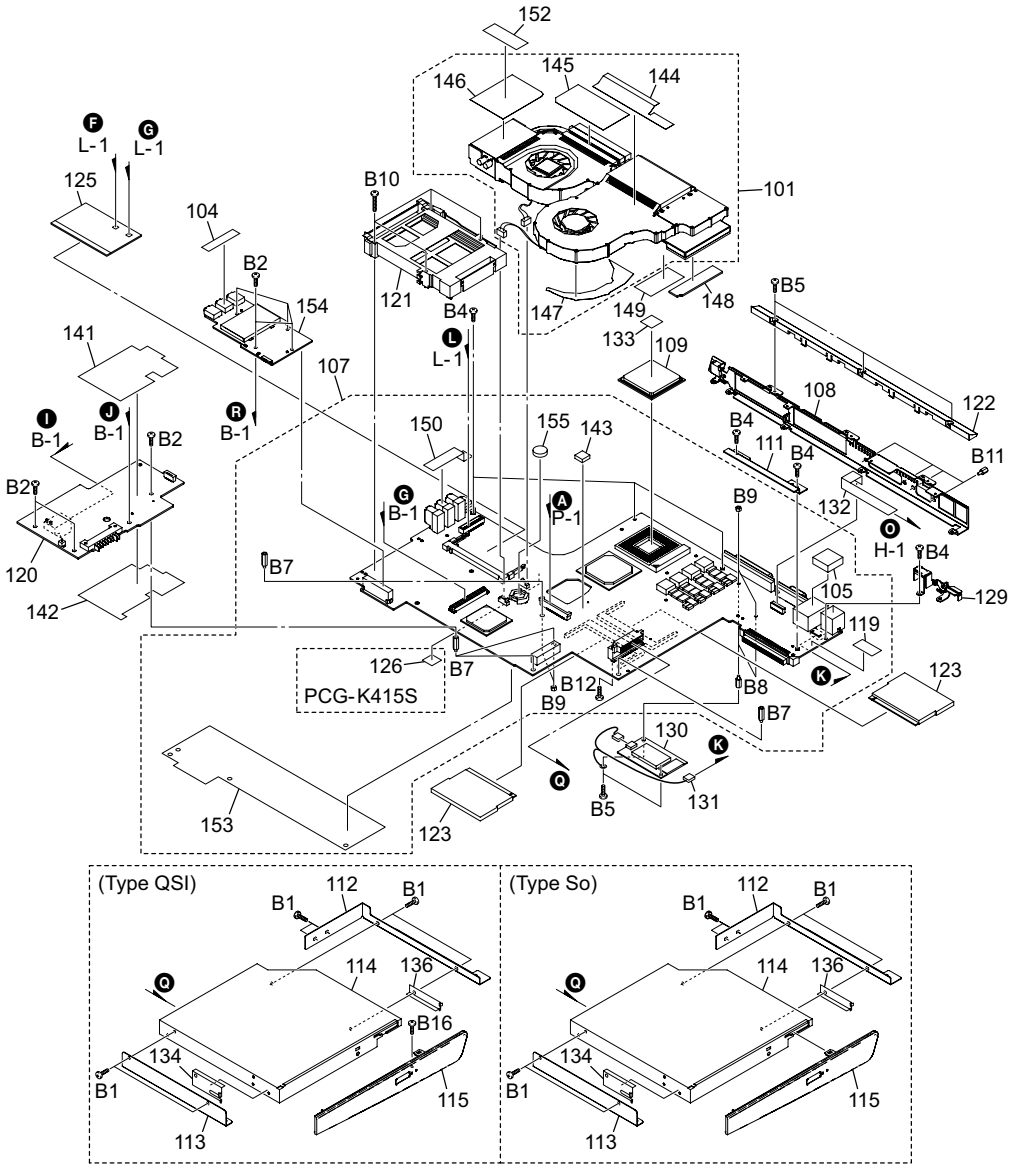
| Ref. No. | Part No. | | | Description |
|---|---|---|---|---|
| 1 | X-2023-730-1 | | | HOUSING PALMREST ASSY JE51 |
| 3 | 4-681-301-01 | | | LATCH DETECTOR |
| 4 | 4-676-233-01 | | | SPRING LATCH DETECTOR |
| * 5 | 2-178-998-01 | | | BRACKET KEYBOARD |
| 6 | A-8068-709-A | $ | | COMPLETE PWB SWX-169 |
| 7 | 4-681-295-02 | | & | CUSHION PALMREST |
| 8 | 4-681-296-01 | | | ESCUTCHEON TOUCHPAD |
| 9 | 2-179-005-01 | | | BRACKET TOUCHPAD |
| 11 | 1-829-355-11 | | | CABLE, FLEXIBLE FLAT TP-PWS |
| 12 | 1-829-140-11 | | | FFC (TO T/P) |
| 13 | 1-796-319-51 | | | PAD, TOUCH |
| 14 | 2-179-580-01 | | | TAPE TP |
| 15 | 2-179-001-01 | | | BRKT PALMREST R |
| 16 | 2-179-002-01 | | | BRKT PALMREST L |
| 19 | 2-349-107-01 | | | GASKET USB JE5 |
| B1 | 4-216-272-01 | | | SCREW (M2), + |
| B2 | 4-641-726-12 | | | SCREW (M2), SPECIAL HEAD |
| B4 | 4-641-726-41 | | | SCREW (M2), SPECIAL HEAD |
| B5 | 4-665-205-01 | | | SPECIAL FLAT HEAD (EG GRIP), M2 |

| | Ref. No. | Part No. | Description | AM K47 | AM K45 | AM K45F | AM K43F | AM K44FP | AM K43Q | EU K415S | EU K415B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 1-478-597-12 | KEYBOARD UNIT(US) | ● | ● | | | | | | |
| | | 1-478-598-12 | (UK,Dutch)...KEYBOARD UNIT(GB) | | | | | | | ● | ● |
| | | 1-478-598-23 | (German)...KEYBOARD UNIT(DE) | | | | | | | | ● |
| | | 1-478-598-42 | (Dutch,French)...KEYBOARD UNIT(FR) | | | | | | | ● | |
| | | 1-478-598-62 | (Spanish)...KEYBOARD UNIT(ES) | | | | | | | | ● |
| ⚠[MA] | | 1-478-598-72 | KEYBOARD UNIT(LA) | | | ● | ● | ● | | | |
| ⚠[MA] | | 1-478-598-82 | KEYBOARD UNIT(CA) | | | | | | ● | | |
| | | | | | | ⚠[MA] | ⚠[MA] | ⚠[MA] | ⚠[MA] | | |

- This parts list contains two different types of parts.
  The first type is the parts that are common to all models.
  The other type is the parts that are different depending on each model.

- この部品表は，機種共通の部品と，機種によって使い分けが必要な部品に分かれています。

# M-1.Main Board



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# M-1.Main Board

| Ref. No. | Part No. | | Description |
|---|---|---|---|
| 101 | A-1086-462-A | $ | JE5 COOLING UNIT (S) |
| 104 | 2-349-106-01 | | CUPPER TAPE AUDIO JE5 |
| 105 | 2-022-439-01 | | GASKET LAN |
| 108 | X-2023-732-1 | | I/O BRACKET ASSY |
| * 111 | 4-674-030-01 | | GUIDE DRIVE |
| * 112 | 2-159-394-01 | | BRACKET DRIVE R JE2 |
| * 113 | 2-179-006-01 | | BRACKET DRIVE L JE2 |
| 119 | - | | KAPTON TAPE |
| 120 | A-1071-984-A | $ | COMPLETE PWB PWS-45 |
| 121 | 1-818-420-12 | | PC CARD CONNECTOR |
| 122 | 4-681-305-01 | | COVER HOOD |
| * 129 | 2-179-009-01 | | BRACKET DC JACK |
| 130 | 1-761-606-14 | | CARD, MODEM |
| 131 | 1-963-379-11 | | HARNESS 2PIN (JE5) |
| 132 | 1-830-249-11 | | CABLE,FLEXIBLE FLAT S-M JE5 |
| 133 | 2-549-332-01 | | PAD CPU JE5 |
| 134 | 4-670-244-01 | | SPRING DRIVE R |
| 141 | 2-189-268-01 | | INSULATOR PWS TOP |
| 142 | 2-189-269-01 | | INSULATOR PWS BOTTOM |
| 143 | 2-189-270-01 | | CUSHION FAN 1 |
| 144 | 2-549-328-01 | | INSULATOR FIN1 JE5 |
| 145 | 2-549-329-01 | | INSULATOR FIN2 JE5 |
| 146 | 2-549-330-01 | | INSULATOR FIN3 JE5 |
| 147 | 2-549-331-01 | | INSULATOR FAN1 JE5 |
| 148 | 2-549-333-01 | | PAD POWER JE5 |
| 149 | 2-549-334-01 | | PAD POWER MOS JE5 |
| 150 | 2-349-105-01 | | CUPPER TAPE USB JE5 |
| 152 | - | | KAPTON TAPE |
| 153 | 2-581-064-01 | | BOTTOM SHIELDING JE5 |
| 154 | A-1071-988-A | $ | COMPLETE PWB IFX-371 (WL) |
| 155 | 1-756-148-11 | | SECONDARY, BATTERY LITHIUM |
| B1 | 4-216-272-01 | | SCREW (M2), + |
| B2 | 4-641-726-12 | | SCREW (M2), SPECIAL HEAD |
| B4 | 4-641-726-41 | | SCREW (M2), SPECIAL HEAD |
| B5 | 4-665-205-01 | | SPECIAL FLAT HEAD (EG GRIP), M2 |
| B7 | 2-549-335-01 | | STAND M2* 3.5-10.4 |
| B8 | 4-651-989-41 | | SPACER (MBX) |
| B9 | 7-622-205-05 | | NUT M2 TYPE2 |
| B10 | 4-644-637-91 | | GRIP, M2 EG |
| B11 | 4-635-966-01 | | SCREW (HEX) |
| B12 | 7-621-772-50 | | SCREW +B 2X10 |
| B16 | 4-679-805-01 | | SCREW (B1.7), TAPPING |
| B17 | 4-679-805-11 | | SCREW (B1.7), TAPPING |

| | | | | AM | | | | | | EU | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ref. No. | Part No. | | Description | K47 | K45 | K45F | K43F | K44FP | K43Q | K415S | K415B |
| 107 | A-1071-982-A | $ # | COMPLETE PWB MBX-126 INT JE51 | ● | ● | ● | ● | ● | ● | | ● |
| | A-1071-983-A | $ # | COMPLETE PWB MBX-126 EXT JE51 | | | | | | | ● | |
| 109 | 6-707-623-01 | | IC RK80546HE0831MSL7NA(3.06GHz) | | | | | ● | | ● | |
| | 6-707-622-01 | | IC RK80546HE0881MSL7NB(3.20GHz) | ● | ● | ● | | | ● | | |
| | 6-707-757-01 | | IC RK80546RE083256SL7NX(Cel-3.06GHz) | | | | ● | | | | ● |
| 114 | 8-457-624-90 | $ # | DRIVE, DVD DW-D56A-V2 | ● | | ● | | | | ● | ● |
| | 1-796-941-12 | $ # | COMBO DRIVE (SBW-242C)(QSI) | | ● | | ● | ● | ● | | |
| 115 | X-2024-583-1 | | ASSY SO D56A BEZEL | ● | | ● | | | | ● | ● |
| | X-2024-615-1 | | ASSY QSI 242C BEZEL | | ● | | ● | ● | ● | | |
| 123 | 6-705-096-01 | | IC HYS64D64020HBDL-6-C(512MB) | ● | | | | | | | |
| | 6-707-029-01 | | IC HYS64D32020HDL-6-C(256MB) | | ● | ● | ● | ● | ● | ● | ● |
| 125 | 1-789-014-31 | | CARD, WIRELESS LAN | | | | | | | ● | ● |
| | 1-789-014-11 | | CARD, WIRELESS LAN | ● | ● | ● | ● | ● | ● | | |
| 126 | 2-022-443-01 | | VGA HEATSINK | | | | | | | ● | |
| 136 | 4-677-259-01 | | SPRING DRIVE L | | ● | | ● | ● | ● | | |
| | | | | | ⚠ [MA] | ⚠ [MA] | ⚠ [MA] | ⚠ [MA] | | | |

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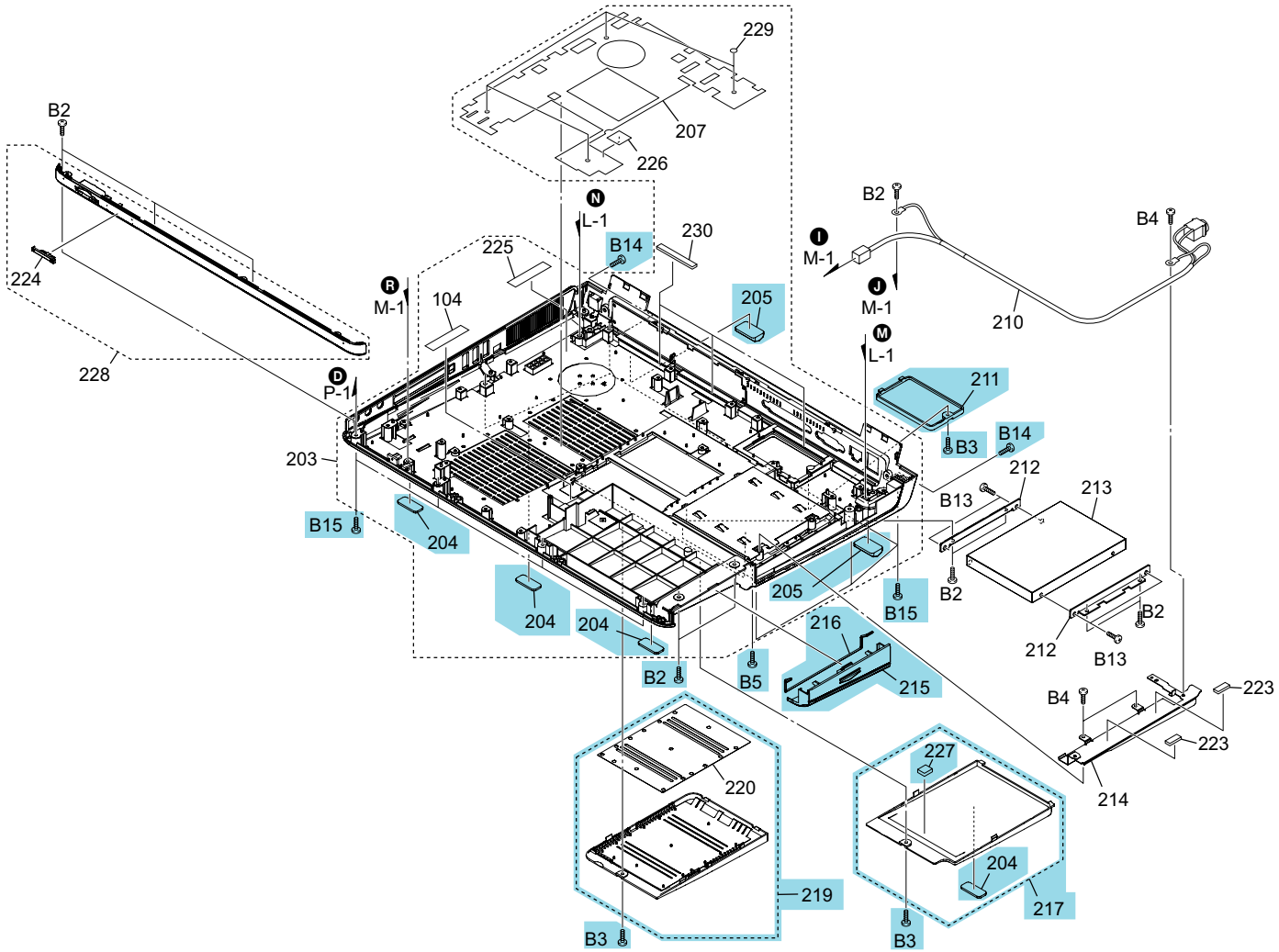
- When change the CPU (ref. 109), refer to "Replacing the CPU" in CHAPTER 5.
- CPU（Ref. 109）を交換する際には，CHAPTER 5の「Replacing the CPU」をご参照下さい。

# B-1. Bottom



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# B-1. Bottom

| Ref. No. | Part No. | | Description |
|---|---|---|---|
| 104 | 2-349-106-01 | | CUPPER TAPE AUDIO JE5 |
| 203 | X-2023-731-1 | | HOUSING BOTTOM ASSY JE51 |
| 204 | 2-050-614-01 | & | FOOT FRONT |
| 205 | 4-674-041-02 | & | FOOT REAR |
| 207 | 2-179-007-01 | | INSULATOR HEATSINK BTM |
| 210 | 1-963-704-11 | | HARNESS, DC JACK |
| 211 | 4-681-314-01 | & | COVER MODEM |
| * 212 | 4-674-033-01 | | BRACKET HDD |
| * 214 | 2-179-008-01 | | BRKT HOLDER PW CABLE |
| 215 | 4-681-318-01 | & | DOOR BATTERY |
| 216 | 4-681-337-01 | & | BATTERY DOOR LINK |
| 217 | X-2048-464-1 | & | COVER HDD ASSY JE5 |
| 219 | X-2022-037-1 | & | COVER MEMORY ASSY |
| 220 | 4-682-977-01 | | INSULATOR MEMORY |
| 223 | 2-176-882-01 | | GASKET ODD JE3 |
| 224 | 4-681-362-01 | | SWITCH WIRELESS LAN |
| 225 | 2-189-273-01 | | CUSHION FAN 2 |
| 226 | 2-549-326-01 | | ACETATE TAPE BLACK JE1 |
| 227 | 2-022-449-01 | & | SPONGE COVER HDD |
| 228 | X-2023-743-1 | | ESCUTCHEON FRONT ASSY (WL) |
| 229 | 2-549-325-01 | | INSULATOR HEATSINK BTM2 JE5 |
| 230 | 2-022-444-01 | | GASKET HOUSING BTM1 |
| B2 | 4-641-726-12 | <&> | SCREW (M2), SPECIAL HEAD |
| B3 | 4-672-834-31 | & | SCREW, +B EG GRIP |
| B4 | 4-641-726-41 | | SCREW (M2), SPECIAL HEAD |
| B5 | 4-665-205-01 | & | SPECIAL FLAT HEAD (EG GRIP), M2 |
| B13 | 4-673-018-02 | | SCREW SPECIAL HEAD |
| B14 | 4-673-655-01 | & | SCREW +B |
| B15 | 4-644-637-01 | & | GRIP, M2 EG |

| Ref. No. | Part No. | | | Description | AM K47 | AM K45 | AM K45F | AM K43F | AM K44FP | AM K43Q | EU K415S | EU K415B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 213 | A-1086-982-A | $ | # | HDD(40GB,HTS424040M9AT00)(S) | | | | ● | ● | | | ● |
| | A-8117-201-A | $ | # | HDD(MHT2060AT-60GB)(S) | | | ● | | | | ● | |
| | A-1083-189-A | $ | # | HDD(MHT2080AT-80GB)(S) | | ● | | | | ● | | |
| | A-1083-188-A | $ | # | HDD(MHU2100AT-100GB)(S) | ● | | | | | | | |

△1 [MA] △1 [MA] △1 [MA] △1 [MA]

- This parts list contains two different types of parts.
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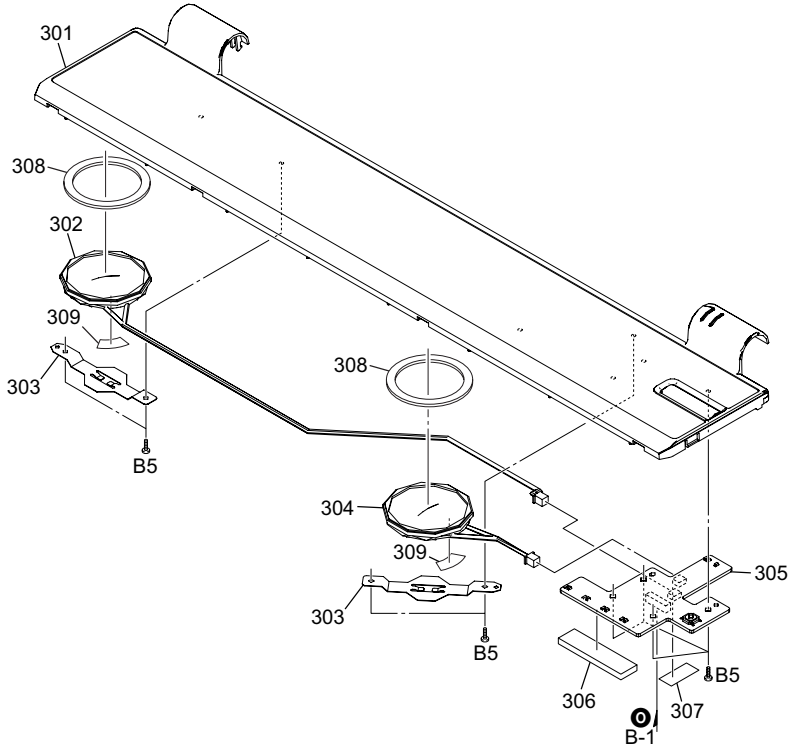
  The other type is the parts that are different depending on each model.

- この部品表は，機種共通の部品と，機種によって使い分けが必要な部品に分かれています。

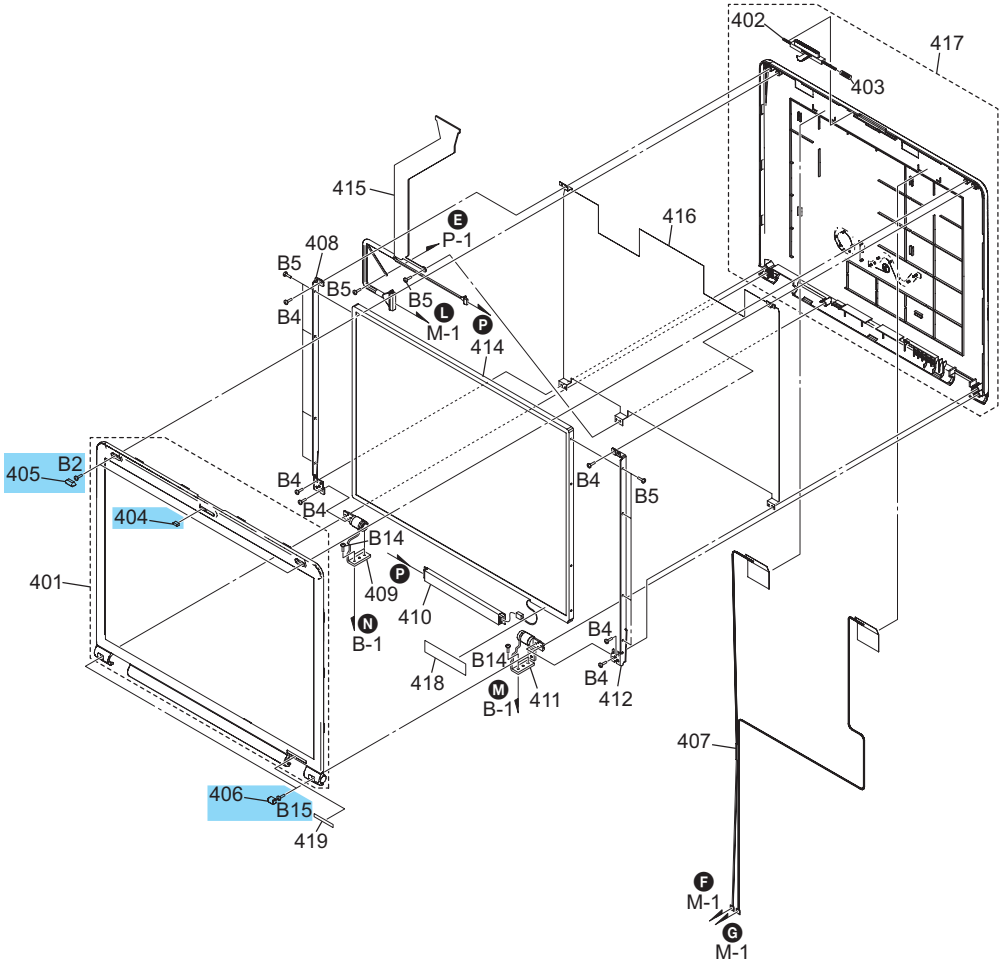
# H-1. Hood Keyboard



# H-1. Hood Keyboard

| Ref. No. | Part No. | | Description |
|---|---|---|---|
| 301 | X-2022-035-1 | | HOOD KB ASSY |
| 302 | 1-825-825-21 | | SPEAKER (3.2CM) |
| * 303 | 4-681-308-01 | | BRACKET SPK |
| 304 | 1-825-825-11 | | SPEAKER (3.2CM) |
| 305 | A-8068-706-A | $ | COMPLETE PWB SWX-168 |
| 306 | 2-022-447-01 | | GASKET PW BOARD |
| 307 | - | | KAPTON TAPE |
| 308 | 2-179-699-01 | | CUSHION SPEAKER |
| 309 | 2-189-971-01 | | GUARD SPEAKER |
| B5 | 4-665-205-01 | | SPECIAL FLAT HEAD (EG GRIP), M2 |

# L-1. LCD 15.4-inch WXGA (High Brightness)
## – Made by QDI –



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# L-1. LCD 15.4-inch WXGA (High Brightness) – Made by QDI –

| Ref. No. | Part No. | | | Description |
|---|---|---|---|---|
| 401 | X-2022-041-1 | | | BEZEL DISPLAY ASSY |
| 402 | 2-050-591-01 | | | BUTTON LATCH LCD |
| 403 | 2-176-929-01 | | | SPRING LATCH LCD JE3 |
| 404 | 4-681-353-02 | | & | CUSHION LATCH |
| 405 | 4-681-354-02 | | & | CUSHION LCD |
| 406 | 4-681-355-02 | | & | CUSHION HINGE |
| 407 | 1-754-326-11 | | | DUAL BAND ANTENNA (HBLACK) |
| * 408 | 2-067-071-01 | | | BRACKET LCD L |
| 409 | 2-179-000-01 | | | HINGE L |
| 410 | 1-478-805-12 | | | INVERTER UNIT |
| | 1-478-976-11 | | | INVERTER UNIT |
| 411 | 2-178-999-01 | | | HINGE R |
| * 412 | 2-067-070-01 | | | BRACKET LCD R |
| 414 | A-1070-777-A | $ | # | ASSY LCD 15WXGA(QDI)(S) |
| 415 | 1-963-380-11 | | | HARNESS, LCD (JE5) |
| 416 | 2-050-612-01 | | | LCD SHIELDING |
| 417 | X-2022-040-1 | | | HOUSING DISPLAY ASSY |
| 418 | - | | | KAPTON TAPE |
| B2 | 4-641-726-12 | | & | SCREW (M2), SPECIAL HEAD |
| B4 | 4-641-726-41 | | | SCREW (M2), SPECIAL HEAD |
| B5 | 4-665-205-01 | | | SPECIAL FLAT HEAD (EG GRIP), M2 |
| B14 | 4-673-655-01 | | | SCREW +B |
| B15 | 4-644-637-01 | | & | GRIP, M2 EG |

| | Ref. No. | Part No. | Description | AM K47 | AM K45 | AM K45F | AM K43F | AM K44FP | AM K43Q | EU K415S | EU K415B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 419 | 2-584-826-01 | ID LABEL (U) | ● | | | | | | | |
| | | 2-584-826-11 | ID LABEL (U) | | ● | | | | | | |
| ⚠[MA] | | 2-584-826-41 | ID LABEL (U) | | | ● | | | | | |
| ⚠[MA] | | 2-584-826-51 | ID LABEL (U) | | | | ● | | | | |
| ⚠[MA] | | 2-584-826-61 | ID LABEL (U) | | | | | ● | | | |
| ⚠[MA] | | 2-584-826-71 | ID LABEL (U) | | | | | | ● | | |
| | | 2-584-826-21 | ID LABEL (E) | | | | | | | ● | |
| | | 2-584-826-31 | ID LABEL (E) | | | | | | | | ● |

⚠[MA] ⚠[MA] ⚠[MA] ⚠[MA]

- This parts list contains two different types of parts.
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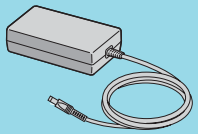
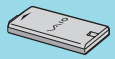
- この部品表は，機種共通の部品と，機種によって使い分けが必要な部品に分かれています。

# A-1. Accessories

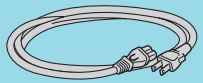
**1001**
**AC Adaptor**



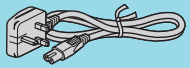
**1002**
**Battery**



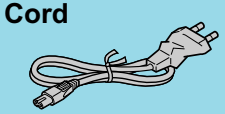
**1004**
**Power Cord**



**1005**
**AC Power Cord**



**1008**
**Power-supply Cord**



| | Ref. No. | Part No. | | | Description | AM K47 | AM K45 | AM K45F | AM K43F | AM K44FP | AM K43Q | EU K415S | EU K415B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ⚠ | 1001 | 1-478-390-72 | $ | & | ADAPTOR, AC | ● | ● | ● | ● | ● | ● | ● | ● |
| ⚠ | 1002 | A-8120-052-A | $ | & | BP-2NY(U)ASSY(S) | ● | ● | | | | | | |
| | | A-8120-053-A | $ | & | BP-2NY ASSY (S) | | | ● | ● | ● | ● | ● | ● |
| ⚠ | 1004 | 1-829-237-21 | | & | CORD, POWER | ● | ● | ● | ● | ● | ● | | |
| ⚠ | 1005 | 1-823-935-51 | | & | CORD, AC POWER | | | | | | | ● | ● |
| ⚠ | 1008 | 1-827-481-21 | | & | POWER-SUPPLY CORD | | | | | | | ● | ● |
| | - | 1-816-429-12 | | & | (UK)...PHONE PLUG (GB) | | | | | | | ● | ● |
| | - | 2-585-159-01 | | & | QUICK START (K) (EN) (CDS) | ● | ● | | | | | | |
| ⚠[MA] | - | 2-585-160-01 | | & | QUICK START (K) (FR) (CDS) | | | | | | ● | | |
| ⚠[MA] | - | 2-585-161-01 | | & | QUICK START (K) (SP) (CDS) | | | ● | ● | ● | | | |
| | - | 2-584-827-11 | | & | (UK,Dutch)...HW SPECS | | | | | | | ● | ● |
| | - | 2-584-827-21 | | & | (German)...HW SPECS | | | | | | | | ● |
| | - | 2-584-827-31 | | & | (Dutch,French)...HW SPECS | | | | | | | ● | |
| | - | 2-584-827-41 | | & | (Spanish)...HW SPECS | | | | | | | | ● |
| | - | 2-584-827-51 | | & | (UK,Dutch,French)...HW SPECS | | | | | | | ● | |

⚠[MA] ⚠[MA] ⚠[MA] ⚠[MA]

- This parts list contains two different types of parts.
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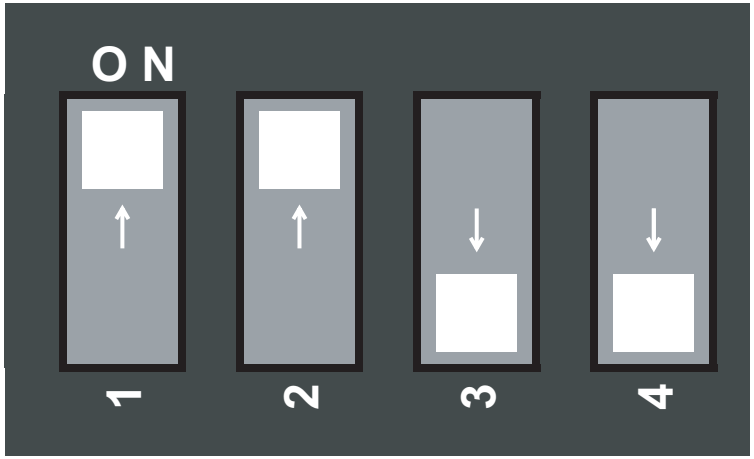
- この部品表は，機種共通の部品と，機種によって使い分けが必要な部品に分かれています。

# *DIP Switch*

・The DIP switch setting is following table.
・DIPスイッチの設定は下の表をご参照ください。




△2 [COR]



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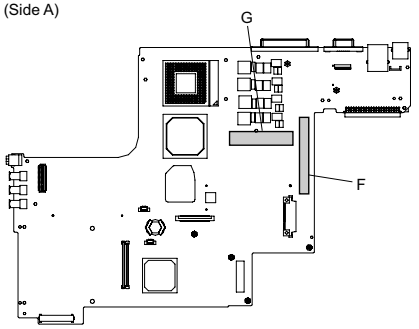
# CHAPTER 5.
# OTHER

## 5-1. The Barcode Label

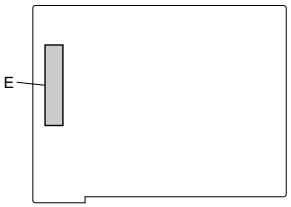
The hatched portion of the barcode is used as the repair data.

バーコードラベルの網掛け部は，修理データとして使用いたします。

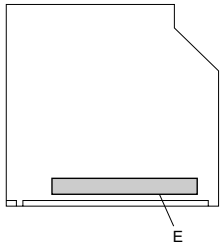
[ MBX-126 Board ]
(Side A)



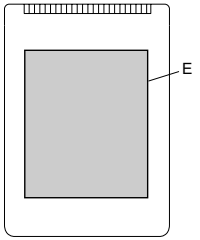

[ LCD 15.4-inch WXGA (High Brightness) (QDI) ]
(Rear)



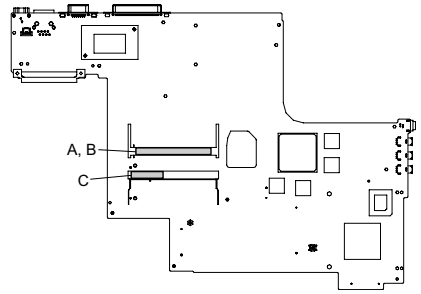

[ DVD+-RW Drive (Made by Pa) ]
(Top)



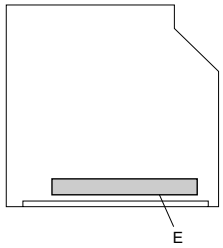

[ HDD ]
(Top)




[ MBX-126 Board ]
(Side B)




[ Combo Drive (Made by QSI) ]
(Top)




| | |
|---|---|
| A | : Part No. |
| B | : Serial No. |
| C | : Revision No. |
| D | : Product Code |
| E | : Maker Barcode |
| F | : Global User ID (iLink) |
| G | : Mac Address |
| ▭ | : Barcode |

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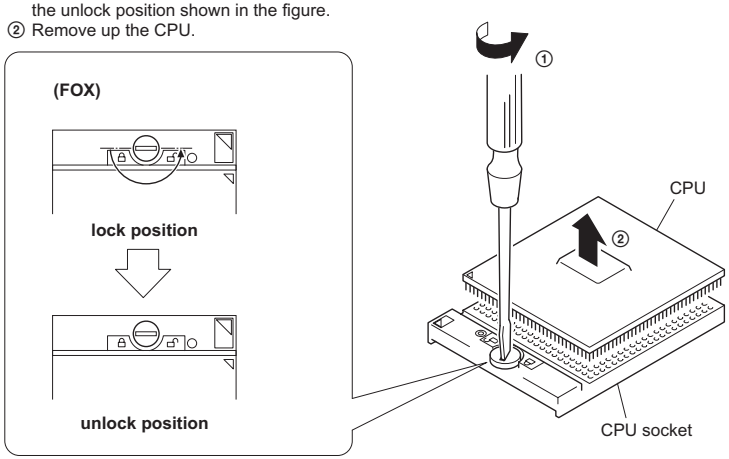
# 5-2. Replacing the CPU

Note: We have two kinds of CPU for this set, and either of them is used.
Two kinds of CPU have differences in the lock position and the unlock position.

## 1. Socket configuration 1

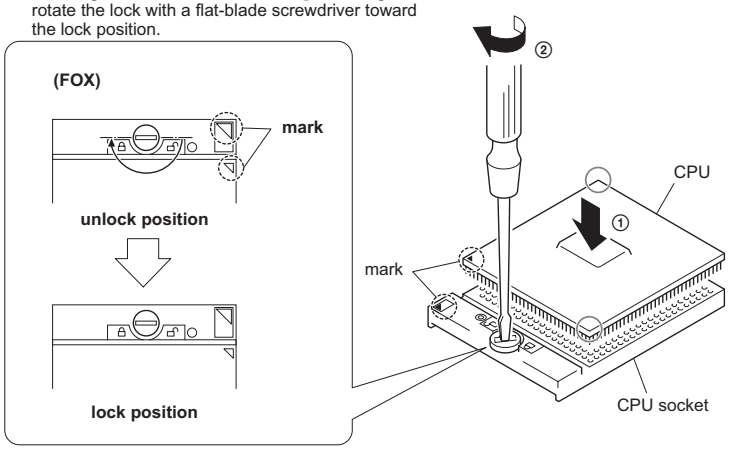
**1. How to remove the CPU**

① Rotate the lock with a flat-blade screwdriver toward the unlock position shown in the figure.
② Remove up the CPU.




**2. How to install the CPU**

① Position the mark on the CPU to the mark on the CPU socket and put in all pins to the holes on the CPU socket.
② Pressing two corners marked with ○ in the figure, rotate the lock with a flat-blade screwdriver toward the lock position.

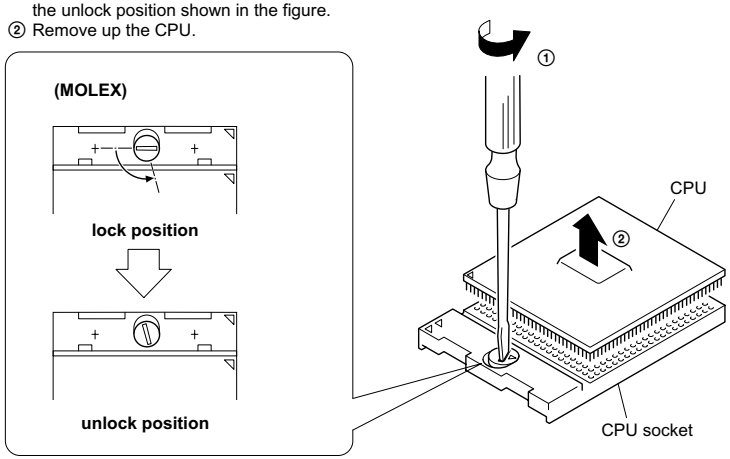



Note: Lock the CPU properly, or operation becomes unstable.

## 2. Socket configuration 2

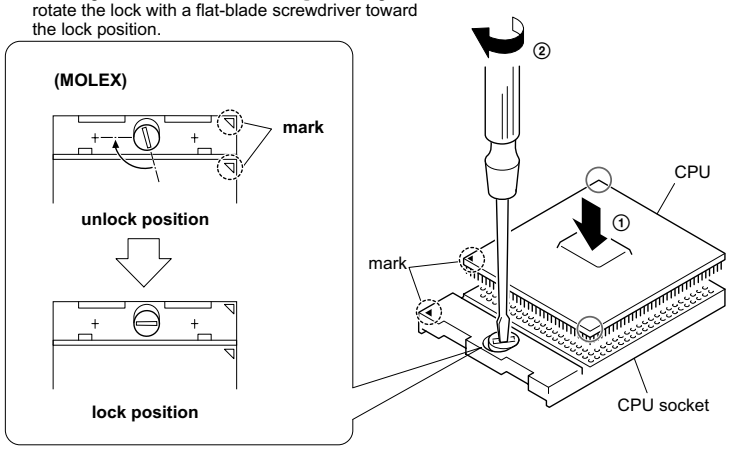
**1. How to remove the CPU**

① Rotate the lock with a flat-blade screwdriver toward the unlock position shown in the figure.
② Remove up the CPU.




**2. How to install the CPU**

① Position the mark on the CPU to the mark on the CPU socket and put in all pins to the holes on the CPU socket.
② Pressing two corners marked with ○ in the figure, rotate the lock with a flat-blade screwdriver toward the lock position.




Note: Lock the CPU properly, or operation becomes unstable.

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## List of K Series (PCG & VGN) (As of April, 2005)

| Service Manual | Model Name | | | |
|---|---|---|---|---|
| | J | AM | EU | AO |
| 9-876-365-XX | | PCG-K12FP<br>PCG-K12P<br>PCG-K13<br>PCG-K13F<br>PCG-K13Q<br>PCG-K14<br>PCG-K15<br>PCG-K15F<br>PCG-K17 | PCG-K115B<br>PCG-K115M<br>PCG-K115S<br>PCG-K115Z<br>PCG-K195BP<br>PCG-K195HP | PCG-K64<br>PCG-K64S<br>PCG-K66P<br>PCG-K66SP |
| 9-876-371-XX | VGN-K30<br>VGN-K30B<br>VGN-K50B<br>VGN-K70B | PCG-K20P<br>PCG-K24FP | PCG-K215B<br>PCG-K295HP | PCG-K74<br>PCG-K74S<br>PCG-K76P<br>PCG-K76SP |
| 9-876-373-XX | | PCG-K23<br>PCG-K23F<br>PCG-K23Q<br>PCG-K25<br>PCG-K25F<br>PCG-K27 | PCG-K215M<br>PCG-K215S<br>PCG-K215Z | |
| 9-876-388-XX | VGN-K31<br>VGN-K31B<br>VGN-K71B | PCG-K33<br>PCG-K33F<br>PCG-K33P<br>PCG-K33Q<br>PCG-K34FP<br>PCG-K35<br>PCG-K35F<br>PCG-K37 | PCG-K315B<br>PCG-K315M<br>PCG-K315S<br>PCG-K315Z | PCG-K86P<br>PCG-K86SP |
| 9-876-406-XX | | PCG-K43F<br>PCG-K43Q<br>PCG-K44FP<br>PCG-K45<br>PCG-K45F<br>PCG-K47 | PCG-K415B<br>PCG-K415S | |

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English/Japanese
2005D0500-1
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# Revision History

| Suffix | Ver. | Date | Contents | QM No. |
|---|---|---|---|---|
| -01 | Ver. 1 | 2005.01.07 | First Edition | |
| -02 | Ver. 2 | 2005.01.28 | 1 Front Page (Model Lineup), Page 1-1, Page 4-1, Page 4-3, Page 4-5, Page 4-7, Page 4-11 to 4-12, Back Cover | N2004_145AK |
| -03 | Ver. 3 | 2005.05.10 | 2 Page 4-13 | N2005_005CK |
| | | | | |

<Remarks>